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Are Russian Commercial Courts Biased? Evidence from a Natural Bankruptcy Experiment*

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Abstract:

We study the nature of judicial bias in bankruptcy proceedings following the enactment of bankruptcy law in Russia in 1998. We find that regional political characteristics affected judicial decisions about the numbers and types of bankruptcy procedures initiated after the law took effect. In particular, controlling for indicators of firms' insolvency and the quality of the regional judiciary, reorganization procedures were significantly more frequent in regions with politically popular governors and governors who had hostile relations with the federal government. Poor judicial quality was also associated with higher incidence of reorganizations. In addition, the quality of the regional judiciary affected performance of firms in reorganization procedure: in regions with poor judicial quality firms in reorganization significantly underperformed firms not in bankruptcy; while the opposite was true in regions with high-quality judges. The effect of judicial quality on restructuring is particularly strong in regions with politically popular governors because the judicial bias in governor's favor is the highest in poor-quality courts when governors are popular. This evidence is consistent with previously reported anecdotes, which suggested that politically strong regional governors used bankruptcy proceedings to protect firms from paying federal taxes.

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1. Introduction

Laws and regulations that perfectly fit into a well-developed market economy might bring unexpected outcomes when transplanted to an emerging market. The performance of legal rules depends upon the environment in which they are applied. Enforcement and application of legal rules can be subverted by powerful actors who have political influence over law enforcers (Glaeser, Scheinkman, and Shleifer, 2003). In addition, law enforcers themselves may have their own career concerns or preferences for fairness and social justice that dictate them to apply the law differentially (Gennaioli and Shleifer, 2005). Enactment of Russia's 1998 Bankruptcy Law provides a natural experiment for studying mechanisms behind poor law enforcement. Prior to the enactment of the law, there was virtually no bankruptcy institution. As a result, many firms had accumulated tax arrears and overdue debts and were candidates for bankruptcy after the enactment of the 1998 law. Only a very small fraction of them actually went bankrupt. Selective application of the law allows us to study the biases in law enforcement.[1] The results help drawing general lessons on how to transplant legal rules and design them from scratch in emerging markets.

The main goals of Russia's 1998 Bankruptcy Law were to restructure loss-making enterprises or close them down (if restructuring was not possible) and to provide creditors with an effective tool of debt recovery. In 1997, the share of loss-making enterprises in Russia was about 50%, and total overdue loans and taxes amounted to 30% of GDP, of which overdue tax liabilities to the consolidated budget were about 7% of GDP (Goskomstat, 1999). The Law had been drafted according to up-to-date academic standards (e.g., EBRD, 2000a, 2000b; Black and Kraakman, 1996; La Porta et al., 1998). EBRD (2000b) stated:

> "*If applied, consistently within the language of the law, the Russian [insolvency] system may result in the same or greater recovery for a secured creditor than results from many Western systems. …it could be argued that the Russian bankruptcy system adequately addresses the creditors' bargain and common pool issues…*"[2]

Yet, the law failed to achieve the intended goals: after its enactment, recovery rates remained low and restructuring was going very slowly. According to Goskomstat (2001), even after the full recovery from the 1998 crisis the share of Russian loss-making enterprises in 2000 was above 37%

[1] Berglof, Rosenthal, and von Thadden (2001) note that "the most striking feature of Russian bankruptcy law, and of Russian corporate law in general, is the enormous discrepancy between laws on the book and the laws as they are enforced" (see also Pistor, Raiser, and Gelfer, 2000).

[2] In addition, Michelle Camdesus, the Managing Director of the International Monetary Fund, stated in his address at the U.S.-Russia Business Council on April 1, 1998: "A new bankruptcy law entered into effect on March 1 which – though not perfect – should provide a powerful tool for enforcing tax compliance and hard budget constraints."

and bankruptcy was initiated against no more than 2% of insolvent firms. The World Bank reports that recovery rates remained below 50% in 2004 (Doing Business, World Bank, 2005).

Using firm-level data on the application of the law, we test a hypothesis suggested by voluminous anecdotal evidence that the driving force behind the law's poor enforcement was its subversion by regional governors – the second tier in the three-tiered federalist system in Russia. We find systematic evidence that regional governors had significant influence over law enforcers. In particular, the political strength of regional governors and their relationship with the federal authorities was a major determinant of the number and type of bankruptcy proceedings initiated by regional commercial courts after the enactment of the 1998 Bankruptcy Law.

The fact that the governors managed to affect outcomes of bankruptcy proceedings is an interesting and, to some extent, unexpected finding. Regional governors were competing for influence over law enforcers with a wealthy and powerful coalition of Moscow-based banks owned by Russian "oligarchs" and the federal government who were the major creditors of Russian firms at the time. The federal government was primarily concerned with collecting federal tax arrears; whereas the oligarchic banks were interested in gaining control over non-paying enterprises in addition to simple debt recovery. In contrast, regional governors, often in coalition with incumbent managers of firms, were interested in keeping financial resources and control over assets in their own hands. The oligarchs had substantially more resources to bribe law enforces compared to the regional governors or incumbent managers. The federal government, had it been politically strong, would have had means of influence both over the regional governors and judges. Nonetheless, anecdotal evidence (e.g., Black et al., 2000, Moss, 2000, and Volkov, 2004) suggests that the regional governors' political control over the judiciary allowed them to leave the federal government and oligarchs empty-handed.[3]

In a sociological study, Volkov (2004) describes the mechanism of subversion of the 1998 Bankruptcy Law and illustrates it with a few examples: The reorganization procedure was used by governors in order to protect firms from paying federal taxes and repaying debt to Moscow-based banks. The automatic stay on assets provision of the bankruptcy law was used to freeze their claims, and firms continued their usual operations, while being formally under protection provided by the reorganization procedure. In many cases, the incumbent managerial team remained in control over the firms under reorganization: formally, the top manager was replaced by his/her closest ally. This

[3] Federal tax arrears were growing throughout the 1990s. In the beginning of 1998, they reached 5% of Russia's GDP. Cai and Treisman (2004), Sonin (2003), and Ponomareva and Zhuravskaya (2004) discuss theory and evidence of regional governors' protection of firms from paying federal taxes. Shleifer and Treisman (2000) discuss the reasons and the consequences of federal government's political weakness.

was contrary to the law prescription, which postulated that incumbent managers should be deprived of control over the firm and a bankruptcy practitioner should be appointed to run the firm on creditors' approval. Sometimes, the incumbent management team was replaced by managers who had closer ties with the regional governor. Presumably, this happened when the incumbent managers and the governors could not agree on the terms of sharing the rents from expropriation of creditors and the federal budget. In addition, in some circumstances judges had the power to prolong reorganization proceedings for the so-called "socially important" enterprises up to 10 years. This clause of the law was often used to maintain the status quo for years so that managers with close ties to regional governors could stay in control, while the federal government and the Moscow-based banks could not recover their claims. Irrespective of what happened to the incumbent management, the bias of bankruptcy court judges towards regional political powers undermined the idea of bankruptcy as an institution that protects creditor rights.

Why commercial courts may depend on regional authorities? There is no single systematic study of the incentives of commercial court judges. Presumably, there are two underlying reasons for the judicial bias. First, judges depend on regional authorities in their career prospects: after retiring from service in commercial courts, they often continue to work in regional administrations and regional state enterprises as lawyers. Anecdotal evidence suggests that there is virtually no inter-regional or vertical mobility among the lowest-tier commercial judiciary. Moreover, appointments of regional judges require approval of regional authorities. Second, the political and geographical distance from the federal center forces judges to adhere to the regions socially.

The best-known example of dependence of commercial court judges on regional political elites was the bankruptcy proceedings of the oil holding Sidanko and its key subsidiaries Chernogoneft and Kondopetroleum in 1999. During Chernogoneft bankruptcy proceedings, 98% of the creditors voted for a certain bankruptcy practitioner, but the judge overruled their decision and appointed a different candidate connected to another oil company, Tyumen Oil. The court also rejected the offer by Chernogoneft, already in bankruptcy, to pay all creditors in full. Incidentally, the Tyumenskaya Oblast Governor, Leonid Roketsky, happened to be the Chairman of the Board at Tyumen Oil. The latter bought Chernogoneft for $176 million and Kondpetroleum for $52 million (a small fraction of the actual market value). Black, Kraakman, and Tarasova (2000) wrote: "… *Apparently, […] Tyumen Oil didn't merely bribe judges (Sidanko could have offered its own bribes), but threatened them as well…*" *The Economist* (Dec. 4, 1999) wrote that according to allegations of one of the competitors to Tyumen Oil's, the company intimidated judges; in addition, Sidanko complained that: "If they just stuck to bribing judges, we could play that game too."

The evidence is not confined to the Tymen oblast. The so-called Governor's Off-budget Fund, formed in 1997 in Kemerovskaya oblast, provides another example of well-established political ties between regional governors and large firms, on the one hand, and commercial court judges, on the other. According to a national Russian daily *Izvestia* (September 16, 1999), a deeply-troubled West-Siberian Metallurgy Kombinat (ZapSib, Kemerovo's biggest steel plant) despite being in the middle of bankruptcy proceedings, regularly contributed to the governor's Fund with the consent of the judge, while accumulating large federal tax arrears. Such contributions are a direct violation of the law. Under the governor-controlled reorganization procedure, the company debts increased to about $400 million from $130 million (*New York Times*, 2000).[4]

In this paper, we provide systematic evidence that the application of the law was, indeed, biased in favor of regional authorities. Our empirical strategy is twofold. First, we look at how the initial (i.e., taken before the enactment of the new law) regional factors influenced the probability of a firm to fall into either the reorganization or the liquidation proceedings after the enactment of the law, holding the level of firms' financial health constant. We find that reorganization procedures were more frequently initiated against firms in regions with politically strong governors (who exercised control over courts more easily) and in regions with a higher degree of political independence from the federal center (which made it less politically costly for the governors to expropriate federal tax revenues). In contrast, liquidation procedures were less frequently initiated against firms in regions with high degree of political independence from the federal center.

Second, we test whether firms that found themselves in reorganization procedures after the enactment of the law restructured, as dictated by the law, or did not, as the story of bankruptcy subversion by regional governors would suggest. We find that in regions with a particularly bad quality of the regional judiciary (due both to low skills and regional bias of judges), firms in reorganization demonstrated significantly lower growth rates in sales, labor productivity, and product varieties compared to similar firms not in bankruptcy. In contrast, in regions with high-quality judges, the opposite was true: firms in reorganization outperformed firms outside bankruptcy in terms of growth indicators. The effect of poor judicial quality on performance is stronger in regions with politically popular governors because in these regions the bias in governor's favor in poor-quality courts is the greatest. These findings are consistent with the view that politically strong governors subverted enforcement of the bankruptcy law in Russia.

[4] "Using Bankruptcy As a Takeover Tool: Russian Law Puts Healthy Companies at Risk," *New York Times,* October 7, 2000.

By analyzing the consequences of a legal transplant to a weakly institutionalized environment, our paper contributes to the literature on legal transplants (i.e., Berkowitz, Pistor, and Richard, 2003a, 2003b; and Pistor, Raiser, and Gelfer, 2000). We also contribute to the literature on comparative bankruptcy law by analyzing workings of the law enforcement in different institutional environments (see, for instance, Aghion, Hart, and Moore, 1992; Hart, 2000; Bolton, 2002; Ayotte and Yun, 2003; Povel, 1999; World Bank, 2004, 2005; Berkovitch and Israel, 1999; Claessens and Klapper, 2005; Djankov, McLiesh, Shleifer, 2006). Our findings also have relevance to the literature on Russia's federalism (Qian and Weingast, 1997, Shleifer and Treisman, 2000, Sonin, 2003, Cai and Treisman, 2004, Zhuravskaya, 2000, Ponomareva and Zhuravskaya, 2004), since we document that the bankruptcy institution is used by regional governments as a mechanism for redistributing tax revenue from the federal center to the regions.

The rest of the paper is organized as follows. Section 2 describes institutional background and presents details of the bankruptcy legislation and basic statistics. Section 3 describes the results of econometric analysis. Section 4 concludes.

2. Institutional background

2.1. Commercial courts

In Russia, bankruptcy cases are decided by commercial ("*Arbitrazh")* courts. In 1991, Russia entered economic transition with "*Gosarbitrazh"*, a state judicial organ. *Gosarbitrazh* decided cases primarily based on either the current considerations of fulfillment of five-year plans, or direct political orders; whereas law did not enter into consideration (Hendley, 1999). In 1991, judicial reform established commercial courts as a state tribunal charged with resolving business disputes. Since 1995, Russian commercial courts have been organized in three-tier system. There are 81 courts of first instance (i.e., regional courts), ten appellate courts, and one Higher Arbitrazh Court, which is the commercial court of last instance.

The most commonly considered cases by commercial courts are contractual disputes, tax disputes between firms and federal government, disputes over ownership of property, use of land, antitrust, environmental and customs regulation, as well as over registration, licensing and certification. The next most common type of cases considered in commercial courts is bankruptcy proceedings. (See Hendley, 1999, for a detailed information on the dynamics of caseload.)

It is important for our story that the law requires the plaintiff to file a suit in the commercial court of the first jurisdiction (regional court) of the region, where the defendant is officially registered. This prevents competition between different regional courts (see, for instance, Shvets,

2005). Jurisdictions of each of the regional courts coincides with the administrative borders of their respective regions. The ties between regional judges and regional authorities in many regional courts have been very strong throughout the second half of 1990s. First, since 1995, judicial appointments required consent of regional authorities. Formally, all nominations to the positions of judges in regional commercial courts (done by the qualifying committee of judges) are approved by the regional legislative assembly, which in many regions is under political control of the governor, i.e., the top regional executive.

The law requires commercial courts be financed only from the federal budget. Nonetheless, anecdotal evidence suggests that the lack of federal financing lead to a common situation, in which regional governments covered a large part of courts expenses from the regional budgets and even supplemented judges' salaries.

There is no agreement in the literature on the quality of Russian commercial courts. Hendley, Murrell, and Ryterman (2001) survey Russian entrepreneurs to find that commercial court judges are regarded as having high ethical standards; they conclude that the commercial court system is less corrupt relative to other institutions in Russia. (In their survey, there were no questions on the integrity of judges in bankruptcy proceedings, however.) In addition, Hendley (1999) argues that there are relatively small delays in commercial court hearings. In contrast, Black and Tarasova (2000) make a case that commercial courts in Russia are very corrupt and have almost no experience in dealing with complicated business cases. Black and Kraakman (1996) and Hay and Shleifer (1998) discuss evidence of frequent severe delays in court hearings.

2.2. Bankruptcy legislation

Russia has had the bankruptcy legislation since November 1992. (Although the first Russia's bankruptcy regulation was adopted in 1740, there were no bankruptcy institution during the last five decades of the Soviet regime.) The 1992 bankruptcy law was completely ineffective: between 1992 and 1998, very few companies went bankrupt. The failure of this law to bring about financial discipline was due to the limited scope of its application and excessively complicated procedures. In order to initiate a bankruptcy procedure according the 1992 law, the total amount of outstanding debt had to exceed the total book value of a company's assets. In practice, a company manager could simply issue worthless debt to his own firm at a high face value to avoid bankruptcy. Thus, for Russia's companies, courts, and tax collectors, there was no operational bankruptcy legislation in Russia before 1998.

The law of 1998 was supposed to amalgamate best parts of the U.S. and UK Bankruptcy Codes and make the initiation of bankruptcy very easy. Formally, under the 1998 law, if a creditor

filed a bankruptcy petition, the following procedure was undertaken. First, a temporary manager, appointed by a bankruptcy court judge, collected information about the claims on the company and organized a creditor meeting. At the meeting, the creditors decided if they wanted liquidation or reorganization. Second, the judge made a ruling on the liquidation or reorganization of the company, taking into consideration the resolution of the creditor meeting. The judge appointed a "liquidation manager" if a liquidation was ordered, or an "external manager" if a reorganization was ordered. The judge did not necessarily need to follow the creditors' request. This clause in the law was motivated by the fact that creditors may opt for an inefficient liquidation. Initiation of both procedures was supposed to deprive the incumbent management of control over the firm.

Thus, the main features of the 1998 law were (i) the dismissal of management upon filing, aimed at hardening budget constraints for managers, and (ii) the judicial discretion to mitigate creditors' tendency to over-liquidate, in case survival is socially efficient. These two features were in contrast with the U.S. bankruptcy law, which emphasized debtor-in-possession but offers judges fewer opportunities to mandate reorganization than the Russian law. The reorganization procedure according to the 1998 the Russian bankruptcy law was much harsher on the incumbent management compared to Chapter 11 of the U.S. bankruptcy law and less creditor-friendly than the U.K.'s reorganization procedure, which allowed creditors' full control.

In December 2002, a new bankruptcy law was adopted. Although changes introduced by the new law aimed at reducing an outright fraud frequent under the 1998 law, most features important for our story remained intact (see Thompson, 2002, for an overview of main changes).

2.3. Basic bankruptcy statistics

The Russian 1998 law was expected to vastly improve managerial incentives because it was supposed to be harsh on the incumbent management. This was in drastic contrast to legislation in place prior to 1998. The result should have been an improvement of creditor protection, and thus, *ex-ante* efficiency, which is considered crucial for financial development (e.g., von Thadden, Berglof, and Roland 2003, La Porta et al. 1997, 1998, 2000). The hope was that the law would boost development of private credit institutions. In terms of private credit to GDP ratio, Russia was on 84th place out of 129 countries (Djankov, McLiesh, and Shleifer, 2006). Indeed, since the law was adopted, the bank credit as percentage of GDP increased as shown in Figure 1 and so did the number of initiated bankruptcy procedures, as shown in Table 1. These two facts were often interpreted by policymakers as hard evidence of an overall success of the bankruptcy reform. Such interpretations, however, may be misleading. One has to be very careful in drawing welfare conclusions from these facts. First, an increase in (private) credit can be a consequence of soft budget constraints (Maskin

and Xu, 2001), rather than an indication of improvement in ex-ante efficiency. This is particularly likely in transition economies. For instance, this is the reason why private credit to GDP ratio in China is above that in many financially developed countries, e.g. Germany and France (Djankov, McLiesh, and Shleifer, 2006). Second, bankruptcy procedures were initiated primarily against fly-by-night firms that had been created primarily for tax evasion purposes and disappeared shortly after registration, while the vast majority of loss-making firms continued to operate, unaffected by bankruptcy. (The 1998 law had no special procedure for the liquidation of an absent debtor.) Analysis in this paper shows that the law had different effect in different regions depending on the quality of the regional judiciary and political strength of regional governors.

Table 2 summarizes basic firm-level characteristics in 1997 for three groups of firms: 1) all firms, 2) firms that fell into reorganization procedure in 1998, and 3) firms that fell into liquidation procedure in 1998. The three groups differ both in the average size of firms and average basic performance characteristics, such as labor productivity, labor productivity growth and profitability. As one would expect, firms under liquidation were the worst performers, on average, whereas firms unaffected by bankruptcy procedures were the best. The most noticeable difference among the three groups is the firms' size. Liquidation procedures were initiated primarily against small and medium-size enterprises. In contrast, reorganization procedures were initiated against much larger enterprises. On average, sales of firms under reorganization were fifteen times larger compared to sales of firms that entered a liquidation procedure; and the difference in the number of employees was fourfold. Political economy literature explains why politicians may be opposed to liquidation of large companies and why there can be too few liquidation procedures (e.g., Shleifer and Vishny, 1994, Boycko, Shleifer, and Vishny, 1996, Tornell, 2001, Kornai, Maskin, and Roland, 2003). Thus, it is not surprising that small firms were liquidated, while large firms were reorganized after the new law took effect. In this paper, we show that preferences for the choice of liquidation and reorganization diverged in the federal and regional governments in Russia.

3. Analysis

3.1. Data

We compiled data from the following sources: the list of publicly announced reorganization procedures initiated in 1998 and the first half of 1999 comes from the "*Internet Securities*" (www.securities.ru) and the AK&M news service (www.disclosure.ru) data bases; a comprehensive list of liquidation procedures initiated in 1998 and the first half of 1999 comes from *the Higher Bankruptcy Court Journa*l (*Vestnik Vysshego Arbitrazhnogo Suda*); data on firms in 1996-1999

were obtained from the Russian Enterprise Registry Longitudinal Database (RERLD, the annual census of large and medium-size industrial enterprises); firm-level financial data come from the ALBA data set of balance sheets for large Russian industrial firms; regional statistical data come from statistical abstracts Regions of Russia, 1999, the official web site of the Russia's State Tax Agency, MFK Renaissance, Central Elections Commission of RF, and Shvets (2005).[5]

3.2. Did regional political characteristics influence the type of bankruptcy procedures?

Our main hypothesis is that regional courts are biased in favor of the regional governors. The two alternatives that we consider are as follows: commercial court judges are either unbiased in their decisions, or they are biased against regional governors in favor of the federal government and Moscow-based banks (i.e. firms' main creditors). These three alternative hypotheses about the biases of the regional judiciary generate different predictions for the firms' likelihood of going into reorganization or liquidation. We focus on how the *ex ante* characteristics of the firms, their industries, and regions (before the 1998 law was adopted) influenced the odds that these firms ended up in either reorganization or liquidation procedure, or were not affected by either procedure. In particular, we are interested in whether regional political variables affect the probability of a bankruptcy procedure in a firm controlling for its financial health. We consider the following three main regional-level explanatory variables.

(1) Governor's popularity

If judges potentially consider the regional governor's opinion in their rulings, one would expect that the bias towards governors would be stronger for more popular and, thus, politically strong governors than for less popular and, thus, politically weak governors. We use the share of the votes received by the governor in the first round of the latest regional election prior to the enactment of the 1998 bankruptcy law as a proxy for the governor's popularity (we denote this variable as P). If the regional governors influence court decisions and use reorganization procedure as the tool to protect firms from paying federal taxes and debts (as much of anecdotal evidence suggests), one should expect to see more reorganizations in regions with more popular governors. In addition, since liquidations are politically costly, we expect to see fewer liquidation procedures when governors are

[5] Available information on bankruptcies in Russia is very limited: we only have access to the lists of firms against which bankruptcy procedures were initiated in 1998 and the first half of 1999. We merge this information to firm-level and regional-level data from other sources. Unfortunately, there are no micro data on who initiated bankruptcy procedures or what the receipts of any of the claim holders were. Therefore, it is important to keep the data limitations in mind during the following discussion of the tests we perform.

popular. If courts are independent or biased toward creditors, the political strength of the governor should not matter for the numbers or types of bankruptcies.

(2) Federal-regional hostility

Both the federal and the regional authorities may potentially have preference towards reorganization over liquidation simply because politicians prefer not to close down firms for political reasons. Yet, if the hypothesis of the regional subversion of the bankruptcy institution is true, there is a direct conflict between regional and federal authorities in which the regional government uses reorganizations to freeze out federal tax claims. Thus, we would expect the governors that were in open political opposition to the federal center to be more active in using bankruptcy as a mechanism of expropriation of the federal center. More hostility in the relationship of the governor and the federal center implies lower political costs of opposition to the center in general, and in bankruptcy proceedings in particular. Thus, if courts are biased in favor of regional governors, we would expect reorganizations to be more likely when political relationship between the president and the governor are strained. Moreover, as the federal government is fiscally motivated, we would expect liquidations to be more likely when regional and federal governments are friendly to each other compared to a situation when they are at odds with each other and the courts are biased in favor of regional governors. We use an index constructed by MFK Renaissance, H, to measure how hostile the political relationships of the governor and the federal government were in 1997 (larger values mean more hostility). This index uses information on 1) the frequency of public statements by the governor against the policies of the federal center, 2) the extent to which regional laws and regulations violate federal laws, 3) the level of support to the governor by the president at the latest regional election, and 4) the presence of a bilateral treaty between the region and the center.

(3) Judicial Quality

We also use a measure of regional judicial quality (J) as one of our main explanatory variables. The measure was constructed and used by Shvets (2005). It is equal to the average rate of approvals of decisions of regional commercial courts during appeals in higher-jurisdiction commercial courts between 1995 and 2002.[6] Shvets (2005) argues that it is well known that higher-level commercial courts are comprised of much better skilled, motivated, and career-oriented judges. Thus, the rulings of the higher-jurisdiction judges have much lower probability of either being

[6] Unlike other explanatory variables, J partly is measured after the 1998 law got in force. Yet, bankruptcy cases are a tiny share of all the cases considered in the commercial courts, so we do not expect to have any problem with reverse causality.

biased or erroneous due to a simple mistake. (The reason why this is not a panacea for Russian judicial system to appeal to the higher-level court is that only a very small share of cases goes through the higher-jurisdiction commercial courts due to very long delays in consideration and other technical barriers for appeal.) Thus, J measures the average share of correct rulings by regional-level judges. The faulty rulings may, of course, be both due to simple errors (in which case, the variable picks up the level of judicial skills) and deliberate biases of the regional-level judiciary (in which case the variable picks up judicial independence). If the average approval rate is high, the judicial biases are small and courts do not make many random mistakes.

If bankruptcy courts are biased toward regional political authorities, our measure of judicial quality should negatively affect the likelihood that a firm goes into reorganization, since the higher the average approval rate, the smaller the court bias. The same logic suggests that the number of liquidations should decrease when judicial quality increases, since governors are not interested in liquidation. If, in contrast, courts are biased toward the coalition of the federal government and Moscow banks, then an increase in judicial quality might have a positive effect on both reorganizations and liquidations, since the federal government and Moscow-based banks may or may not want to liquidate a distressed firm as their first choice depending on its main objectives. The federal government may prefer reorganization for political reasons and the banks may also prefer reorganization for financial reasons if the industry is liquidity-constrained. Reorganization would probably imply a management change, as required by the bankruptcy law. We expect the law to be enforced in this case because courts are biased in the federal government's favor. Finally, if courts are independent, judicial quality may have an ambiguous effect on creditors' passivity (and thus on the likelihood of reorganization / liquidation) depending on how risk-averse or risk-loving creditors are.[7]

We estimate the Multinomial Logit regression model on the cross-section of firms. The dependent variable is the probability that a firm, given its characteristics before the adoption of the 1998 law, (1) falls into an reorganization procedure, (2) is liquidated, or (3) is unaffected by bankruptcy during a year and a half after the introduction of the new law. We look at *ex ante* characteristics of firms to avoid endogeneity and rule out any reciprocal effects of bankruptcy onto firm characteristics. Our sample consists of 7,815 firms that are drawn from the intersection of RERLD, ALBA, and regional data sets for 1997.

[7] As we would expect in the case of a regional bias in commercial courts, there is a negative correlation (of -0.17) between governor popularity and regional judicial quality. Federal-regional hostility and regional judicial quality are weakly positively correlated. Figure A1 in appendix presents non-parametric relationships between our main explanatory variables.

The estimated equation is as follows:

$$\Pr[B_i = j] = F(\beta_1 P_i + \beta_2 H_i + \beta_3 J_i + \beta_4 \mathbf{X}_i + \varepsilon_i) \quad (1)$$

where i identifies a firm in the sample. B_i is an outcome after the introduction of the new law: it is equal to one of the three following outcomes for each firm in 1998 and the first half of 1999: 0 - bankruptcy procedure was not initiated (comparison group), 1- reorganization procedure was initiated, and 2- liquidation procedure was initiated. F is a logistic function.

The following variables are used as controls. First, we control for the firm-level characteristics that influence the probability that firm ends up in bankruptcy: leverage ratio (log debt-to-assets ratio), coefficient of current liquidity (log ratio of liquid assets to short term liabilities), log cost per unit of output, log labor productivity, log labor productivity growth, log of official employment, and three-digit industry dummies. Firm-level controls are necessary to analyze the effect of regional characteristics of firms that, otherwise, would have similar prospects in bankruptcy. Second, we control for gross regional product per capita. This is an important control because political characteristics of the regions that we are interested in may be correlated with the regional economic development, which, in turn, may affect the number of regional bankruptcy procedures. All control variables are measured in 1997, before the introduction of the new law. Table 1A (see Appendix) presents summary statistics for the variables used in the regression analysis. We correct the standard error for heteroskedastisity and clusters of ε_i within combinations of the regions and two-digit industries (Krishnaiah and Rao, 1994).

Table 3 presents the regression results. We report both the coefficients of the Multinomial Logit regression and marginal effects evaluated at the mean levels of independent variables for the reorganization and liquidation outcomes, holding no bankruptcy as the comparison group.

The hypothesis of a regional bias finds support in the data. As predicted, controlling for firm-level characteristics, the probability of the reorganization procedure initiated against a firm in a region after the enactment of the 1998 bankruptcy law was positively significantly associated with the political popularity of the regional governor (which makes it easier for him to extend his influence on courts), with the extent of regional hostility towards the federal center (which makes it less politically costly for the governor to oppose the federal center), and with the extent of deficiencies in regional commercial courts. The probability of a liquidation procedure is unaffected by the governor's popularity or judicial quality but is negatively and significantly related to a higher degree of hostility in political relations between the region and the federal center. This is consistent with our assumption that the primary motivation for the federal government is fiscal, and thus it

would like to liquidate inefficient firms; while the politically-motivated regional government wants to keep the firms in operation. These results are very robust: they do not depend on a particular specification or a particular set of covariates.

The economic significance of these results is as follows. A one standard deviation increase in the measure of governor's popularity leads to a 2.88% increase in the predicted probability that an average firm ends up in reorganization procedure. In addition, a one standard deviation increase in the regional hostility towards the federal center is associated with a 4.91% increase in the predicted probability of a reorganization procedure. The numbers are based on predicted probability of reorganization that is evaluated at the mean value of employment for firms under reorganization procedure and overall means for all other independent variables. (It is equal to 1.71%.) In addition, a one standard deviation increase in judicial quality leads to a 4.31% decrease in the probability of reorganization.

In contrast, a one standard deviation increase in the regional hostility towards the federal center decreases the probability that an average firm ends up in liquidation by 9.02% of the predicted probability of this outcome. This predicted probability is evaluated at the mean value of employment for firms that are being liquidated and overall means for all the other covariates, which is equal to 0.03%. The numbers are rather small, as most firms in the sample have been unaffected by bankruptcy.

Signs of the coefficients of control variables are also as expected: low levels of current liquidity and labor productivity significantly increase the probability of both bankruptcy procedures. As predicted by political economy models, in which politicians and judges care about employment, we find that firms that end up in liquidation are significantly smaller than average. The size of firms that end up in reorganization procedure is, however, above the size of firms that are unaffected by bankruptcy. This is consistent with our basic story because the regional governments are more likely to use reorganization procedure to protect large rather than small firms from the federal government and creditors.

If bankruptcy were politically independent, regional political variables should have no effect on the probability of bankruptcy procedures unless these variables were correlated with the regional economic distress and we did control for this properly. In this case, however, regional political variables should have had the same effect on the probability of both bankruptcy procedures. In contrast, we find the opposite effects of regional political variables on the probability of reorganization and liquidation procedures holding firm characteristics constant. The governor's political strength and hostility towards the center do not seem to correlate with the regional

economic distress. The correlation coefficients of these variables with various available measures of the regional economic well-being (for instance, per capita growth, index of resource potential, ratio of per capita income to subsistence level, etc.) are small, positive, and insignificant.

3.3. Did reorganization procedures induce restructuring in bankrupt firms?

In this section, we investigate three issues: First, we test whether firms, which found themselves in reorganization procedures after the enactment of the 1998 Bankruptcy Law, restructured as they were supposed to do, or did not restructure as our story of subverted bankruptcies suggests. On average, we should not observe any restructuring following the initiation of reorganization procedures, as these were initiated primarily in order to protect firms from paying federal taxes and overdue debt, rather than reorganize.

Second, we test whether restructuring efforts for firms under the reorganization procedures vary with judicial quality. Poor judicial quality means a higher scope for influence over court decisions. Thus, our prediction is that one should observe relatively less restructuring in firms in reorganization if the court quality is poor.

Third, judicial bias towards regional governors would be particularly strong if the political popularity of the governor is high and the quality of courts is poor. Thus, we expect a stronger effect of poor judicial quality on restructuring in bankruptcy in the regions with popular governors. We test whether data supports this prediction.

We compare several performance measures in similar firms belonging to two groups: 1) a group of firms that started reorganization procedure in 1998 and 2) a control group. The control group is comprised of two firms (if they exist) for each firm in reorganization. The two firms are chosen from the same five-digit industry as the firm in reorganization, such that they are the closest to the firm in size (one smaller, and another one larger).

We use the following three proxies for restructuring: log change in sales, log change in labor productivity, and log number of new product varieties between 1998 and 1999. We run OLS regressions for each of these proxies on the dummy indicating reorganization procedure and the interaction of the reorganization dummy with judicial quality as well as the triple interaction term of reorganization, judicial quality, and governor's popularity.

We estimate the following two equations:

$$Y_i = \beta_1 R_i + \beta_2 R_i (J_i - \bar{J}) + \beta_3 J_i + \beta_4 \mathbf{X}_i + \varepsilon_i \quad \text{and} \tag{2}$$

$$Y_i = \beta_1 R_i + \beta_2 R_i (J_i - \bar{J}) + \beta_3 R_i (J_i - \bar{J})(P_i - \bar{P}) + \beta_4 J_i + \beta_5 P_i + \beta_6 R_i (P_i - \bar{P}) + \beta_7 J_i P_i + \beta_8 \mathbf{X}_i + \varepsilon_i \tag{3}$$

where i indexes firms, Y stands for one of the three measure of enterprise restructuring, R is the dummy indicating firms under reorganization proceedings, J and P indicate our two regional variables of interest: judicial quality and governor's popularity, respectively. Thus, we estimate the effect of judicial quality on restructuring inside bankruptcy procedure using difference-in-differences estimator (equation 2) and the effect of political popularity – using difference-in-differences-in-differences estimator (equation 3). It is important to note that the crucial underlying assumption for the validity of our estimation strategy is that in the absence of cross-regional differences in institutional environment (i.e., judicial quality and political popularity of the governor) the growth rates of sales and labor productivity of firms in bankruptcy and not in bankruptcy would have differed by a constant factor conditional on control variables **X** and would not have been related to judicial quality.

We subtract sample means from each of the variables in all of the interaction terms in order to make interpretation of β_1 straightforward: it is equal to the full effect of reorganization on restructuring evaluated at the mean values of J and P. β_1 in both equations, β_2 in equation (2) and β_3 in equation (3) are our main parameters of interest. β_2 in equation (1) estimates how restructuring in reorganization proceedings depends on judicial quality, whereas, the coefficient on the triple interaction term, β_3 in equation (3), estimates whether the latter effect is influenced by the political popularity of the governor.

Error terms are assumed to cluster at the regional level. $\mathbf{X}_i$ is a vector of control variables, which includes three-digit industry dummies, logs of sales and of employment in 1997, and log change in the stock of the outside finance taken from the firm's balance sheet in 1998-1999. The latter covariate is included to control for a firm's ability to raise outside finance, which is different for firms in and outside bankruptcy and can directly influence their performance. The number of firms that started reorganization procedure in 1998, for which we have all required data, is 115. The resulting sample consists of 319 to 336 firms, depending on the number of missing observations for some covariates.

Table 4 presents the regression results, which are as follows: First, as we have hypothesized, at the mean level of regional characteristics, reorganization procedure has no effect on any of the restructuring measures; namely, there is no difference in restructuring for firms in and outside bankruptcy. (None of the coefficients of the reorganization dummy is statistically significant, and their magnitude is rather small.)

Second, as predicted, judicial quality has an important effect on restructuring in bankruptcy: firms under reorganization proceedings restructure significantly more that firms outside bankruptcy

in regions with a high quality of the judiciary and restructure significantly less in regions with a low quality of the judiciary. The cross-term of reorganization dummy and judicial quality has positive and for two out of the three measures of restructuring statistically significant effect. At the level of judicial quality one half of the standard deviation below the mean, firms under reorganization proceedings have 8% lower growth in sales and 16% lower number of new product varieties compared to similar firms outside bankruptcy. In contrast, at the level of judicial quality one half of the standard deviation above the mean, firms under reorganization proceedings have 8% higher growth in sales and only 4% lower growth in product varieties compared to similar firms outside bankruptcy. Thus, judicial quality is crucial to enforcing restructuring of bankrupt firms.

Third, the coefficient on the triple interaction between reorganization, judicial quality and political popularity of the governors has the right sign and is significant for two out of three measures of restructuring, i.e., sales and productivity growth. Thus, we also find support for our hypothesis that politically powerful governors adversely affected the outcomes of reorganization proceedings in regions with poor judicial quality.

Overall, we found strong support for our main hypotheses.

4. Conclusion

The application and enforcement of 1998 Bankruptcy Law in Russia vividly demonstrates that commercial court judges were biased in favor of politically popular regional governors. Reorganization proceedings were significantly more frequent in the regions with politically popular governors and governors who had hostile relations with the federal government. Poor judicial quality was also associated with higher incidence of reorganizations. Moreover, the quality of the regional judiciary affected performance of firms in reorganization: in the regions with poor judicial quality firms in reorganization underperformed relative to firms not in bankruptcy, while the opposite was true for the regions with high-quality judges. This effect is stronger in the regions with popular governors where the bias in governor's favor in courts of poor quality is the strongest.

The political influence of regional governors had transformed bankruptcy into the mechanism that allowed large firms to leave outside claim holders unsatisfied. In particular, the federal government (the largest claim holder on Russian firms) had no effective legal mechanism for collecting tax arrears. The weak and dependent judiciary played a crucial role in this story: The law gave judges substantial discretion over decisions on the fate of insolvent firms (while the rationale was to avoid inefficient liquidations). This discretion was exploited by politically strong regional governors, who had influence over the regional judiciary. Our analysis suggests that it may be

worthwhile to give up some sophisticated features of the law, including judges' discretion, in order to secure implementation of its basic objectives. This is in line with the conclusions of the World Bank's *Doing Business* report (2005), which shows that judicial discretion leads to inferior outcomes in countries with weak institutions.

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Figure 1. Dynamics of bank credit to firms before and after the enactment of the bankruptcy law of 1998. (Position of vertical axis indicated the date of enactment.)

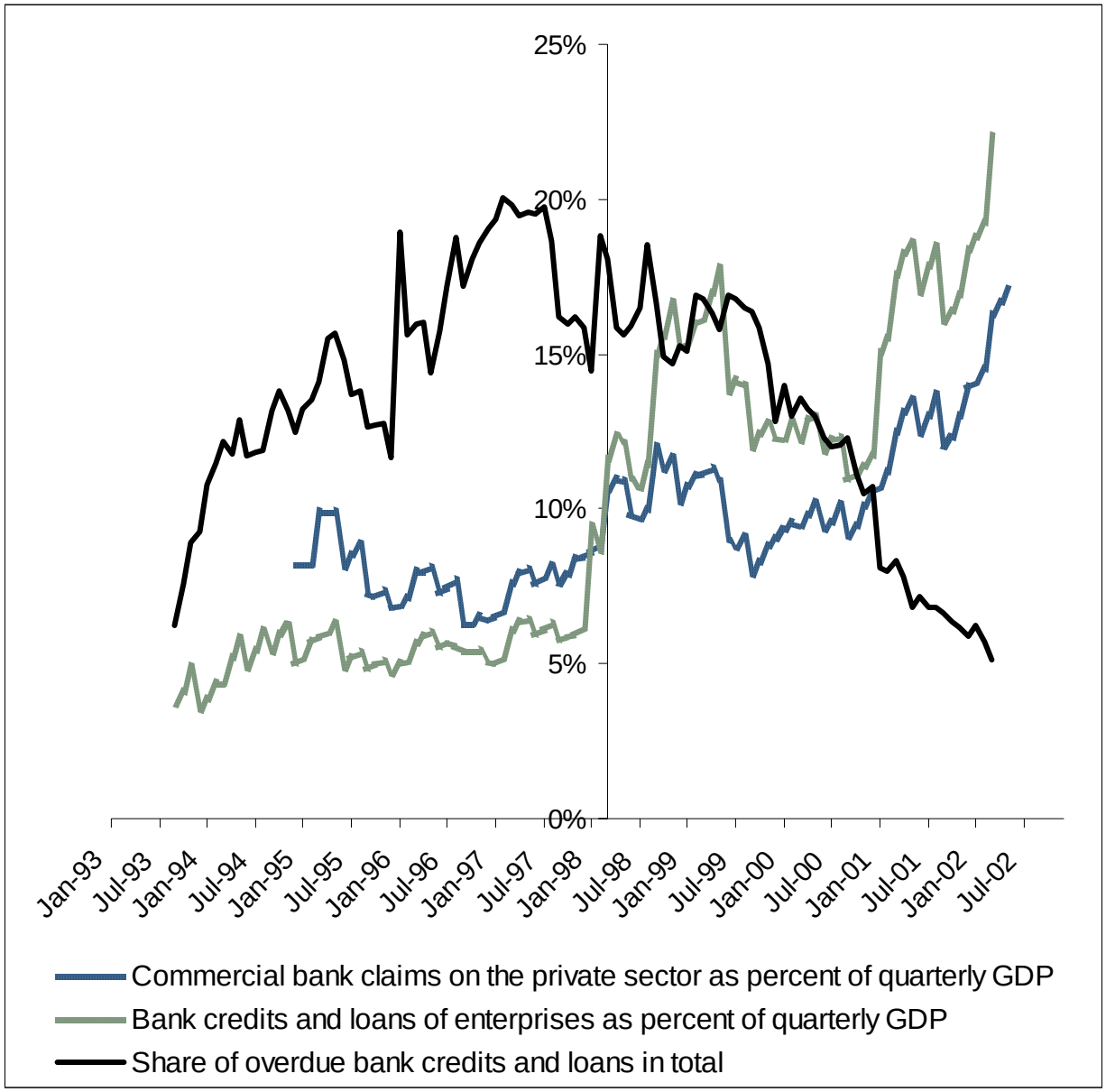


Table 1. Initiation of bankruptcy procedures

Year	Proceedings initiated: total	Proceedings initiated: excluding proceeding against absent debtors
1993	<100	n/a
1994	240	n/a
1995	1 108	n/a
1996	2 618	n/a
1997	4 320	n/a
1998	8 337	4 893
1999	10 933	5 940
2000	19 041	7 959
2001	56 920	8 538

Source: Higher Arbitration Court of the Russian Federation

Table 2. Firms under different bankruptcy proceedings compared to the population of firms

	Significant difference b/w R & L at 5% level	Firms that fell into reorganization proceedings in 1998		Firms that fell into liquidation proceedings in 1998		Population of firms	
		Median	Mean (SE)	Median	Mean (SE)	Median	Mean (SE)
Employment (persons), 1997	Y	796	2,027 (202)	240	472 (45)	143	489 (11)
Sales (Rb.), 1997	Y	18,471	225,491 (50,562)	3,282	14,620 (4,785)	4,516	44,692 (3,806)
Cost per ruble of output (Rb.), 1997	Y	112	143 (7)	135	206 (45)	97	117 (0.97)
Labor productivity (Rb./employee), 1997	Y	27	58 (6)	15	21 (2)	37	58 (62)
Labor productivity growth (%), 1996-1997	Y	-17	-18 (2)	-29	-25 (3)	-5	-4 (34)
Balance sheet net profit (Rb.), 1997	N	-287	-4,349 (2,042)	-297	-3,935 (962)	11	3,334 (437)

Table 3. Initiation of bankruptcy procedures and ex ante firm characteristics: Multinomial Logit estimation

Probability of reorganization (1) or liquidation (2) procedure in a firm in 1998-99 compared to outcome of no bankruptcy (0):

	Reorganization		Liquidation	
	Coefficient	dP(1)/dx	Coefficient	dP(2)/dx
Regional political popularity of the governor	0.98	0.00282	-0.533	-0.00008
	[0.500]*	[0.00143]**	[0.552]	[0.00009]
Regional hostility towards the center, 97	0.214	0.00062	-0.173	-0.00002
	[0.071]***	[0.00023]***	[0.074]**	[0.00001]*
Regional judicial quality, 95-02	-3.052	-0.00878	0.013	0.00000
	[1.182]***	[0.00376]**	[1.098]	[0.00016]
Firm's leverage ratio, 97	0.103	0.0003	0.136	0.00002
	[0.072]	[0.00021]	[0.060]**	[0.00001]*
Firm's current liquidity, 97	-2.097	-0.00603	-3.95	-0.00056
	[0.244]***	[0.00067]***	[0.436]***	[0.00018]***
Firm's log cost per unit of output, 97	0.092	0.00026	0.028	0.00000
	[0.208]	[0.00060]	[0.176]	[0.00003]
Firm's log labor productivity, 97	-0.308	-0.00089	-0.504	-0.00007
	[0.113]***	[0.00036]**	[0.112]***	[0.00003]**
Firm's log labor productivity growth, 96-97	0.047	0.00013	-0.062	-0.00001
	[0.154]	[0.00045]	[0.079]	[0.00001]
Firm's log enterprise employment, 97	0.775	0.00223	-0.25	-0.00004
	[0.069]***	[0.00036]***	[0.104]**	[0.00002]**
Log gross regional product per capita, 97	0.005	0.00002	-0.004	0.00000
	[0.236]	[0.00068]	[0.255]	[0.00004]
3-digit industry dummies included	YES	YES	YES	YES
Frequency of the outcome		2.79%		2.34%
Predicted probability		0.0063		0.00035
Observations		7815		
Pseudo R-squared		0.36		

Note: Comparison group is no bankruptcy. Clusters for combination of 2-digit industry and region are allowed. Second column for each outcome reports marginal effects. (Marginal effects for all three outcomes sum to unity.) Marginal effects are evaluated at the mean values of independent variables. Robust standard errors in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 4. Ex post restructuring and reorganization procedure: OLS

	Log change in sales, 98-99	Log change in labor productivity, 98-99	Log new product varieties, 98-99	Log change in sales, 98-99	Log change in labor productivity, 98-99	Log new product varieties, 98-99
Reorganization	0.006	0.056	-0.106	0.037	0.085	-0.087
	[0.089]	[0.076]	[0.070]	[0.094]	[0.076]	[0.072]
Judicial quality	-0.593	-0.910*	-0.401	-0.594	-0.896*	-0.405
	[0.662]	[0.532]	[0.632]	[0.646]	[0.515]	[0.691]
Judicial quality^{D} * Reorganization	2.004*	1.392	1.408*	1.658	1.108	1.263
	[1.178]	[0.893]	[0.790]	[1.045]	[0.895]	[0.881]
Judicial quality^{D} * Reorganization * Political popularity^{D}				13.100*	11.761*	6.441
				[7.727]	[6.202]	[6.056]
Political popularity				-0.135	-0.052	0.035
				[0.295]	[0.268]	[0.245]
Political popularity^{D} * Reorganization				0.13	0.051	-0.029
				[0.560]	[0.428]	[0.350]
Judicial quality * Political popularity				-0.037	-3.072	-7.112
				[5.045]	[4.364]	[5.130]
Log sales, 97	-0.079	-0.099**	-0.113***	-0.072	-0.097**	-0.121***
	[0.053]	[0.040]	[0.041]	[0.052]	[0.041]	[0.041]
Log employment, 97	0.051	0.093	0.354***	0.047	0.094	0.367***
	[0.091]	[0.065]	[0.066]	[0.090]	[0.065]	[0.065]
Log outside finance, 98-99	0.117***	0.099***	0.001	0.117***	0.100***	0.004
	[0.026]	[0.025]	[0.022]	[0.025]	[0.024]	[0.023]
3-digit industry dummies	YES***	YES***	YES***	YES***	YES***	YES***
Observations	336	336	320	335	335	319
R-squared	0.23	0.23	0.3	0.24	0.24	0.31

Note: Robust standard errors adjusted for clustering at the level of the regions in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%. Coefficients at "Reorganization" show the full marginal effect of reorganization procedure on restructuring evaluated at

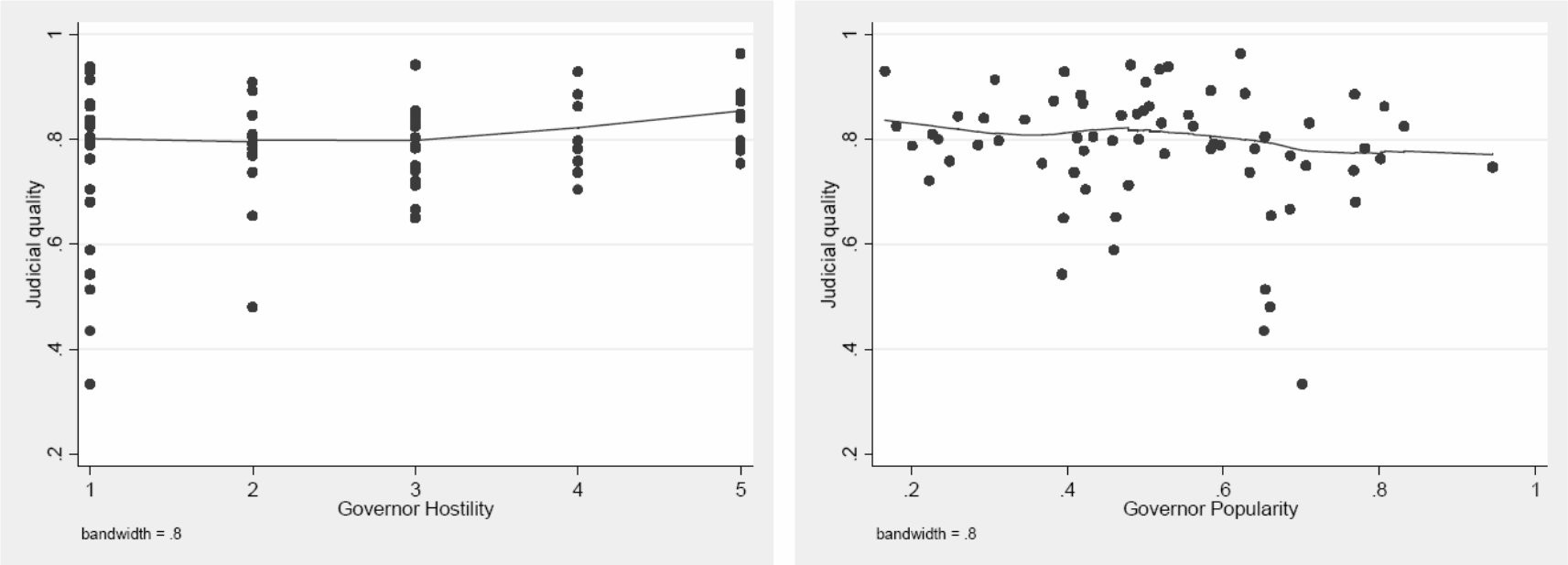
the mean values of governor's political popularity and judicial quality because before taking the cross-terms we subtract means from these variables (this is indicated by the superscript "D").

APPENDIX:

Table 1A. Summary statistics for variables used in regression analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Ex-ante firm characteristics regression:					
Outcome (0-no bankruptcy; 1-reorganization; 2-liquidation)	7815	0.0756	0.3428	0	2
Regional political popularity of the governor, before 98	7815	0.5205	0.1745	0.166	0.9454
Regional hostility towards the center, 97	7815	2.6828	1.353	1	5
Regional judicial quality, 95-02	7815	0.8065	0.084	0.3333	0.9639
Firm's leverage ratio, 97	7815	0.5109	0.7602	0.02	14.7466
Firm's current liquidity, 97	7815	1.2119	1.277	0.0072	38.3556
Firm's Log cost per unit of output, 97	7815	4.6938	0.4452	1.1314	10.8422
Firm's log labor productivity, 97	7815	3.7405	1.2975	-5.9135	9.4803
Firm's log labor productivity growth, 96-97	7815	0.0599	0.653	-24	6.035
Firm's log enterprise employment, 97	7815	5.647	1.3942	0	11.4057
Log gross regional product per capita, 97	7815	9.4984	0.4259	8.5423	11.0892
Ex-post restructuring regressions:					
Dummy for reorganization	337	0.3442	0.4758	0	1
Log change in sales, 98-99	337	0.0333	0.7748	-3.93	2.4878
Log change in labor productivity 98-99	337	0.1035	0.6623	-2.907	2.6042
Log new product varieties, 98-99	321	0.5343	0.633	0	2.7726
Log output, 97	337	5.5734	2.1299	-2.8944	10.9948
Log employment, 97	337	6.6602	1.3619	1.6094	10.1598
Log outside finance, 98-99	337	-1.4205	1.9547	-8.7501	2.8258

Figure A1. Non-parametric relationship between regional judicial quality, on the one hand, and governor's hostility towards the federal center and governor's political popularity, on the other hand



Note: The line in each graph represents that *lowess* smother.